Form 9-330
(Rev. 5-63)

N. M. O. C. C. COPY

copy to Y

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE* (See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: LC-060888

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ DRY ☒ Other

b. TYPE OF COMPLETION: NEW WELL ☐ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other Dry Hole

7. UNIT AGREEMENT NAME: Empire South Deep

8. FARM OR LEASE NAME: Empire South Deep Unit Gas Com.

9. WELL NO.: 9

2. NAME OF OPERATOR: Amoco Production Company

3. ADDRESS OF OPERATOR: P. O. Drawer "A", Levelland, Texas 79336

10. FIELD AND POOL, OR WILDCAT: South Empire - Morrow

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: 660' FNL and 990' FWL Section 5 (Unit D, NW/4 NW/4)
At top prod. interval reported below
At total depth

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: 5-18-29 NMPM

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ARTESIA, OFFICE

14. PERMIT NO.	DATE ISSUED	12. COUNTY OR PARISH	13. STATE
		Eddy	NM

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
6/4/76	7/18/76	Dry Hole	3572.7 GL	-

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
11,194	~~11,194~~		→	0' to TD	-

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: Dual Laterolog Micro-SFL, Compensated Neutron Form Density

27. WAS WELL CORED: No

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	48#	401'	17-1/2"	400 Sx. Circ.	
9-5/8"	36#	2900'	12-1/4"	1700 Sx. Circ.	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (*Interval, size and number*)

4,800'-4,900' - 40 Sx. Class H Plug
2,850'-2,950' - 40 Sx. Class H Plug
Surf. - 20' - 10 Sx. Class H Plug

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
10,540'-10,740'	75 Sx. Class H Plug
8,730'-8,880'	55 Sx. Class H Plug
7,610'-7,760'	55 Sx. Class H Plug
6,730'-6,880'	55 Sx. Class H Plug

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
	Dry Hole	PXA

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*)

TEST WITNESSED BY

35. LIST OF ATTACHMENTS: 2 copies of above listed logs.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Ray W. Cox Ray W. Cox TITLE Administrative Assistant DATE 7/27/76

*(See Instructions and Spaces for Additional Data on Reverse Side)

0 + 3 - USGS - ART
1 - DIV
1 - RC
1 - Susp
20 - PARTNERS

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: *"Sacks Cement":* Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Morrow	10,756'	11,194'	Initial Hydrostatic Head 5,416 PSI, on 15 min. preflow good blow of air, initial 60 min. SI BHP 723 PSI, tool open 60 min., weak blow of air increasing to fair blow of air, gas to surface 45 min., max. 6 PSI on 1/2" choke, decreasing to zero on 1/4" choke in 60 min., gas TSTM (est. 10 MCFD) initial BHP flow 266 PSI, final BHP flow 266 PSI, final 180 min. BHP SI 4,203 PSI, final Hydrostatic Head 5,416 PSI, BH temp. 162 degree F, BH sample at 105 PSI recovered 0.75 cu. ft. gas, no condensate, no formation water, no drilling fluid, recovered 303 ft. drilling mud, effective DST with no apparent malfunction.

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
San Andres	2,738'	
ABO	6,830'	
Wolfcamp	7,718'	
Cisco	8,832'	
Canyon	9,452'	
Strawn	9,732'	
Atoka	10,232'	
Middle Morrow	10,642'	
Lower Morrow	10,953'	
Chester Lime	11,164'	

U.S. GOVERNMENT PRINTING OFFICE: 1963—O-683636

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